WHAT IS CLAIMED IS:

1. A method of purifying used oil comprising the steps of:

placing used oil into a continuous flow apparatus;

contacting the used oil with a base introduced at such a rate as to maintain the base at about 1 weight % to about 10 weight % of the oil composition;

contacting the used oil with a phase transfer catalyst introduced at such a rate as to maintain the phase transfer catalyst at about 2. weight % to about 10 weight % of the oil composition;

heating the composition to a temperature between about 200^0C and about 275^0C;

mixing the composition;

separating the resultant mixture using a first distillation at a temperature of from about 200^0C to about 275^0C and a pressure of from about 100 torr to about 200 torr; and

purifying the used oil using a second distillation at a temperature of from about 275^0C to about 300^0C and a pressure of from about 0.05 torr to about 0.20 torr.

2. The method as recited in Claim 1 additionally comprising the step of:

heating the oil composition obtained from the first distillation to a temperature between about 200^0C and about 300^0C; and

mixing the composition after the first distillation but before the second distillation.

3. A method of purifying used oil comprising the steps of:

placing used oil into a continuous flow apparatus;

contacting the used oil with a base selected from the group including sodium hydroxide and potassium hydroxide introduced at such a rate as to maintain the base at about 1 weight % to about 10 weight % of the oil composition;

contacting the used oil with ethylene glycol introduced at such a rate as to maintain the phase transfer catalyst at about 1 weight % to about 10 weight % of the oil composition;

heating the composition to a temperature between about 200^0C and about 275^0C;

mixing the composition;

separating the resultant mixture using a first distillation at a temperature of from about 200^0C to about 275^0C and a pressure of from about 100 torr to about 200 torr; and

purifying the used oil using a second distillation at a temperature of from about 275^0C to about 350^0C and a pressure of from about 0.05 torr to about 0.20 torr.